



# UNITED STATES PATENT AND TRADEMARK OFFICE

UNITED STATES DEPARTMENT OF COMMERCE  
United States Patent and Trademark Office  
Address: COMMISSIONER FOR PATENTS  
P.O. Box 1450  
Alexandria, Virginia 22313-1450  
www.uspto.gov

APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/964,056	09/26/2001	Toru Ikeda	0941.65870	1448

7590 11/03/2005

Patrick G. Burns, Esq.  
GREER, BURNS & CRAIN, LTD.  
300 South Wacker Dr., Suite 2500  
Chicago, IL 60606

EXAMINER

PSITOS, ARISTOTELIS M

ART UNIT	PAPER NUMBER
----------	--------------

2656

DATE MAILED: 11/03/2005

Please find below and/or attached an Office communication concerning this application or proceeding.

<b>Office Action Summary</b>	Application No. 09/964,056	Applicant(s) IKEDA ET AL. <span style="float: right;">L</span>	
	Examiner Aristotelis M. Psitos	Art Unit 2656	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

**Period for Reply**

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

**Status**

- 1) ☒ Responsive to communication(s) filed on 14 September 2005.
- 2a) ☐ This action is **FINAL**.                      2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

**Disposition of Claims**

- 4) ☒ Claim(s) 1-22 is/are pending in the application.
- 4a) Of the above claim(s) \_\_\_\_\_ is/are withdrawn from consideration.
- 5) ☐ Claim(s) \_\_\_\_\_ is/are allowed.
- 6) ☒ Claim(s) 1,3-5,7-12,14-16 and 18-22 is/are rejected.
- 7) ☒ Claim(s) 2,6,13 and 17 is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

**Application Papers**

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on \_\_\_\_\_ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.  
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).  
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

**Priority under 35 U.S.C. § 119**

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All    b) ☐ Some \* c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

\* See the attached detailed Office action for a list of the certified copies not received.

**Attachment(s)**

- |  |   |
|--|---|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892)  | 4) <input type="checkbox"/> Interview Summary (PTO-413)<br>Paper No(s)/Mail Date. _____ |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948)                                   | 5) <input type="checkbox"/> Notice of Informal Patent Application (PTO-152)             |
| 3) <input type="checkbox"/> Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)<br>Paper No(s)/Mail Date _____ | 6) <input type="checkbox"/> Other: _____  |

Art Unit: 2656

### DETAILED ACTION

#### *Continued Examination Under 37 CFR 1.114*

A request for continued examination under 37 CFR 1.114, including the fee set forth in 37 CFR 1.17(e), was filed in this application after final rejection. Since this application is eligible for continued examination under 37 CFR 1.114, and the fee set forth in 37 CFR 1.17(e) has been timely paid, the finality of the previous Office action has been withdrawn pursuant to 37 CFR 1.114. Applicant's submission filed on 9/14/05 has been entered.

#### *Claim Objections*

Claims 12-22 are objected to because of the following informalities:

In particular, the claimed phrases:

a) "a first setting section", and "a second setting section" as now found in the independent claims fails to comply with 37 CFR 1.75 (d) (1). Appropriate correction is required. Applicants' are cautioned against the entry of any NEW matter.

As far as the claims are interpreted, the following art rejections are made.

#### *Claim Rejections - 35 USC § 103*

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

The factual inquiries set forth in *Graham v. John Deere Co.*, 383 U.S. 1, 148 USPQ 459 (1966), that are applied for establishing a background for determining obviousness under 35 U.S.C. 103(a) are summarized as follows:

1. Determining the scope and contents of the prior art.
2. Ascertaining the differences between the prior art and the claims at issue.
3. Resolving the level of ordinary skill in the pertinent art.
4. Considering objective evidence present in the application indicating obviousness or nonobviousness.

Art Unit: 2656

This application currently names joint inventors. In considering patentability of the claims under 35 U.S.C. 103(a), the examiner presumes that the subject matter of the various claims was commonly owned at the time any inventions covered therein were made absent any evidence to the contrary. Applicant is advised of the obligation under 37 CFR 1.56 to point out the inventor and invention dates of each claim that was not commonly owned at the time a later invention was made in order for the examiner to consider the applicability of 35 U.S.C. 103(c) and potential 35 U.S.C. 102(e), (f) or (g) prior art under 35 U.S.C. 103(a).

1. Claims 1, 5, 9, 10 and 12, 16, 20 and 21 are rejected under 35 U.S.C. 103(a) as being unpatentable over Tani further considered with either Tsukahara et al or Mochizuki et al.

The following analysis is made:

Claim 1

Tani

A write and/or erase method for a storage apparatus, which writes and/or erases information by irradiating a light beam with respect to a target track on a recording medium, comprising the steps of:

(a) setting a write and/or erase power of the light beam with respect to the target track; and

see description of fig 5,  
starting at col. 11, line 19  
as describing figure 5

(b) setting a write and/or erase slice level that is used to detect an off-track of the light beam with respect to the target track depending on the write and/or erase power.

see figs. 17B/18B (step 15)  
and secondary references.

In the above analysis Tani discloses the ability of setting the power level for either recording/erasing as required. Further, although there is a step of setting the slice level – see step 15 in

Art Unit: 2656

either figure 17B or 18B, it is not clear that such are dependent upon the write/erase powers, even though they are used for confirmation of either the erase emission.

Either of the secondary references to Tsukahara et al – see disclosure with respect to figures 8 and 9 starting at col. 10 line 30 and continuing to col 12 line 37, or Mochizuki et al starting at col 8 lines 30-40 disclose the additional teaching of setting the slice level as claimed.

It would have been obvious to modify the base system Tani with the above additional teaching from either of the secondary references, motivation to ensure proper detection of the off track condition.

With respect to claim 5, this claim parallels claim 1 with the additional phrase “is located” in step a. Such a phrase is not understood, i.e., lack of clarity in idiomatic English. Hence the examiner interprets such to mean the same as step a in claim 1. If this is not the case, then further clarification is respectfully required from applicants.

With respect to independent claim 9, step a, is met, and with respect to step b, since one of the parameters so recited is present, this step is met as well.

With respect to apparatus claims 12, 16 and 20 they represent the apparatus elements that perform the above method steps, i.e., methods of claims 1, 5 and 9. Since the above method limitations are met, inherently appropriate sections are present because some sort of “hardware” must exist in order to carry out the method steps.

With respect to claims 10 and 20, as far as the claims recite limitation(s) – see the additional analysis of the above noted figure starting at col 21 line 33 till col. 22 line 19 in Tani. As recited “a dependency” of the write power is different than a dependency of the erase parameter – (the setting of the slice level to a value between the erasing power level and the reading level).

2. Claims 3, 7, 14 and 18 are rejected under 35 U.S.C. 103(a) as being unpatentable over the art as applied to claims 1, 5, 12 and 16 as stated in paragraph 1 above, and further in view of Furuta et al.

Art Unit: 2656

With respect to the changing of the time constant, as noted in Furuta et al, at col. 9 lines 1-20 for instance, the frequency value of a lpf (low pass filter) can be appropriately controlled to optimize the slice level. The examiner interprets this as meeting the limitations of claim 3.

It would have been obvious to modify the base system as relied upon in paragraph 1 above and to include the additional capability, motivation is as discussed in Furuta et al.

3. Claims 4,8,15 and 19 are rejected under 35 U.S.C. 103(a) as being unpatentable over the art as applied to claim 1 as stated in paragraph 1 above, and further in view of Ohara et al and further modified by Richards et al.

With respect to the additional provision with respect to the shock limitation – applicants' attention is drawn to the Ohara et al reference, see col. 6 lines 1-7 for instance which teaches such an additional feature. Although there is no clear depiction of a "time constant", the ability of varying the sensitivity of a shock/vibration detection circuit is further taught by Richards et al – see col. 5 lines 28 plus.

It would have been obvious to modify the base system as relied upon in paragraph 1 above and modify such with the additional teaching from Ohara et al and Richards et al, motivation is to provide for a proper signal recording level and compensate for various system faults.

4. Claims 11 and 22 are rejected under 35 U.S.C. 103(a) as being unpatentable over the art as applied to claim 9 above, and further in view of Sakurai et al.

The ability of varying the power level for a laser beam in this environment predicated upon an appropriate detection of the recording medium is taught by the Sakurai et al system.

It would have been obvious to modify the base system as relied upon with respect to claims 9 and 20 as stated in paragraph 1 above and modify such with the additional teaching from Sakurai et al, motivation is to set the power level in accordance with mode and type of medium used.

Art Unit: 2656

***Allowable Subject Matter***

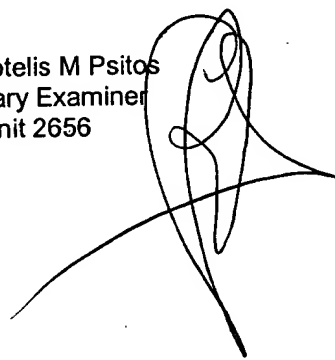
Claims 2,6, 13 and 17 are objected to as being dependent upon a rejected base claim, but would be allowable if rewritten in independent form including all of the limitations of the base claim and any intervening claims as well as correct for any and all rejections under 35 USC 112 as noted above.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Aristotelis M. Psitos whose telephone number is (571) 272-7594. The examiner can normally be reached on M-Thursday 8 - 3.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Hoa T. Nguyen can be reached on (571) 272-7579. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

Aristotelis M Psitos  
Primary Examiner  
Art Unit 2656

A handwritten signature in black ink, consisting of a large, stylized loop with a long horizontal stroke extending to the left.

AMP